

CUSTOMER NO.: 24498
Serial No.: 10/541,762
Office Action dated: 04/02/09
Response dated: 06/01/09

PATENT
PU030012

Remarks/Arguments

Claims 1 and 2 remain pending following the applicant's election of claims pursuant to the examiner's earlier restriction requirement. As written, claims 1 and 2 recite patentable subject matter for the reasons given below. Applicant respectfully traverses the claim rejections for the reasons given below.

35 U.S.C. 101 Rejection of Claims 1 and 2

Claims 1 and 2 stand rejected under 35 U.S.C. §101 as failing to recite statutory subject matter. Applicant traverses this rejection.

As announced by the Court of Appeals for the Federal Circuit in the recently decided case *In Re Bilski*, 545 F. 3d 943, 953 (Fed Cir. 2008), the appropriate test for determining compliance with 35 U.S.C. §101 is the "machine or transformation" test as elucidated by the U.S. Supreme Court in *Benson*, 409 U.S. 70. In particular, to be eligible for a patent under 35 U.S.C. §101, a process must be tied to a particular machine or transform a particular article to a different state or thing.

Applicant maintains that claims 1-2 satisfy the "transformation" prong of the machine or transformation test as set forth in *Bilsky* because the process recited in claim 1 conceals macroblocks having missing or corrupted values. In carrying out such concealment, Applicant estimates a missing or corrupted value in one block based on values in neighboring blocks. Thus, Applicant's process transforms a macroblock with missing or corrupted values into a macroblock which now possesses estimated values for the previously missing or corrupted values. The examiner should appreciate that a macroblock concealed in accordance with Applicant's claimed technique now has a different state than the original macroblock with its missing or corrupted values. In other words, Applicant's concealed macroblock is a different "thing" as compared to the original macroblock with its missing or corrupted values.

Further, the Examiner should appreciate that the concealment of a macroblock as recited in claim 1 does not constitute a mental process that lacks significant physical steps. As part of the concealment step, Applicants estimate the missing or corrupted value from another pixel in the macroblock. Estimating the pixel value cannot simply be done as a mental process. Rather, the actual pixel value of a neighboring block must be obtained to estimate the appropriate value for the missing or corrupted value. On this basis, the examiner cannot simply reject Applicants' claims as lacking significant physical steps.

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Applicants claimed process recited in claim 1 is limited to a practical application of a fundamental principle; namely, the concealment of missing or corrupted pixel values. Thus, Applicant's concealed macroblock constitutes a depiction of a physical object, constituting a 'safe harbor', as established by the Federal Circuit in *Bilski* (545 F. 3d 943 at 963). On this basis, Applicants' claims 1-2, as written, fully comply with 35 U.S.C. §101. Applicants respectfully request withdrawal of that rejection.

35 U.S.C. 102(e) Rejection of Claims 1 and 2

Claims 1 and 2 stand rejected under 35 U.S.C. 102(e) as anticipated by US Patent 6,990,151 in the name of Chang-Su Kim et al. issued from an application filed 5 March 2002. Applicant traverses this rejection.

The Kim et al. patent discloses a technique for concealing in errors in a corrupted video bit stream. As disclosed in FIG. 4, and as discussed at Col. 10, lines 35-67 and Col. 11, lines 1-25, Kim et al. conceal errors in a macroblock from other neighboring blocks. When both the upper and lower macroblocks that neighbor a macroblock having a missing or corrupted block are available, Kim et al make use of both the upper and lower macroblock values (See Col. 10, lines 60-67 of Kim et al.) Indeed, the appearance in FIG. 4 in Kim et al. of both upwardly directed and downwardly directed arrows confirms the use of both upper and lower macroblock values when available.

In contrast, Applicants claimed concealment method recited in claims 1 and 2 progresses in one direction, namely to the larger side of the array. For example, in connection with example depicted in FIG. 3 of Applicant's specification, when Applicant encounters a missing or corrupted value, Applicant conceals that value based on the pixel value that is immediately above it. Thus, Applicant only looks to pixel values in a single direction (namely, the direction progressing towards one of the larger sides of the array). In contrast, the Kim et al. patent does not accomplish concealment by proceeding only in a single direction, but rather proceeds in opposite directions, completely contrary to Applicants' method recited in claims 1 and 2. Therefore, the Kim et al. do not disclose each and every feature of Applicant's claims 1 and 2. Applicant request withdrawal of the 35 U.S.C. 102(e) rejection of claims 1 and 2.

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Conclusion

In view of the foregoing, Applicant solicits entry of this amendment and allowance of the claims. If the Examiner cannot take such action, the Examiner should contact the Applicant's attorney at (609) 734-6820 to arrange a mutually convenient date and time for a telephonic interview.

No fees are believed due with regard to the filing of this Amendment. However, if there is a fee, please charge the fee and/or credit any overpayment to Deposit Account No. 07-0832.

Respectfully submitted,

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